

STATEMENT OF BASIS (AI No. 51724)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0109584 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Water Cut, Inc.
P.O. Box 129
Abita Springs, LA 70420

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Yvonne Baker

DATE PREPARED: September 16, 2005

1. PERMIT STATUS

A. Reason For Permit Action:

Permit reissuance of an Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

B. NPDES permit - NPDES permit effective date: N/A
NPDES permit expiration date: N/A

C. LPDES permit - LA0109584
LPDES permit effective date: September 1, 2000
LPDES permit expiration date: August 31, 2005

D. Date Application Received: April 4, 2005

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - machine shop

An existing facility provides a cutting services using ultra high pressure jet water to cut various materials including glass, marble, granite, and metal. A Garnet abrasive is added to the jet water. No heat is involved in the cutting process and the physical make-up of the material is unchanged. The used Garnet is disposed via Waste Management, Inc.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: II (BPJ from 10 points to 5 points due to minimal flow of ultra high pressure jet cutting water)
3. Wastewater Type: III
4. SIC code: 7389, 3231, 3281

NOTE: SIC code was changed from 3541 to 7389 because the facility does not manufacture metal, but provides a cutting service. SIC codes 3231 and 3281 were added because the facility also cuts granite, marble and glass.

C. LOCATION - 70217 Highway 59 in Abita Springs, St. Tammany Parish
Latitude 30°27'00", Longitude 90°02'29"

3. **OUTFALL INFORMATION**

Outfall 001

Discharge Type: treated sanitary wastewater, floor washdown wastewater, and ultra high pressure jet cutting water

Treatment: Hootie 500 STP

Location: at the point of discharge from the STP prior to mixing with waters of the state

Flow: 430 GPD (60 GPD - treated sanitary wastewater, 20 GPD - washdown wastewater, 350 GPD - ultra high pressure jet cutting water)

Discharge Route: via local drainage to Ponchitalawa Creek

4. **RECEIVING WATERS**

STREAM - Ponchitalawa Creek via local drainage

BASIN AND SEGMENT - Lake Pontchartrain Basin, Segment 040802

DESIGNATED USES - a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife
d. outstanding natural resource waters*

*Outstanding Natural Resource Waters is listed as a designated use of Segment 040802 (Lower Tchefuncte River - From the Bogue Falaya River down to LA HWY 22, excluding any tributaries from the Bogue Falaya River south to LA HWY 22). However, this designated use is applicable only if the discharge is directly into the named waterbody and not into a tributary or distributary of the waterbody, per LAC33:IX.1111.G.

5. **TMDL STATUS**

Subsegment 040802, Lower Tchefuncte River - From the Bogue Falaya River down to LA HWY 22, excluding any tributaries from the Bogue Falaya River south to LA HWY 22, is listed as impaired on the LDEQ 2004 303(d) (2004 List due to organic enrichment/low DO (EPA - Category 5), mercury, and chlorides. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes

for impairment which are not directly attributed to the machine shop point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Based on the evaluation of the effluent discharges, it was determined that the facility has the potential to discharge pollutants which may contribute to organic enrichment/low DO of the receiving waterbody. With this in mind, limitations for BOD5 and COD were applied to the facility's treated sanitary wastewater, floor washdown wastewater, and ultra high pressure jet cutting water discharge.

6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

7. COMPLIANCE HISTORY/COMMENTS

A. Compliance History

A compliance inspection was performed at the facility on May 29, 2001. The following items were noted: a copy of the permit was on site, DMRs were available for review, and 1 TSS and 1 Fecal Coliform excursion were self reported. There was no chlorinator on the STP. A chlorine disinfection system needs to be added.

B. DMR Review/Excursions

There are no DMRs on file at LDEQ.

8. EXISTING EFFLUENT LIMITS

Outfall 001 - treated sanitary wastewater, washdown water and jet cutting water

	STORET Code	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type
Flow -MGD	50050	Report	Report	1/6 months	Estimate
BOD5	00310	---	45 mg/l	1/6 months	Grab
TSS	00530	---	45 mg/l	1/6 months	Grab
Fecal Coliform colonies/100 ml	74055	---	400	1/6 months	Grab
pH (Standard Units)**	00400	6.0 min	9.0 max	1/6 months	Grab

The change from standard conditions are 1/3 months sampling frequency for flow, TSS, and pH because of the presence of jet cutting water and clean floor washdown.

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 040802 of the Lake Pontchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Gulf Sturgeon, which is listed as a threatened species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated 10/21/05 from Watson (FWS) to Gautreaux (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Gulf Sturgeon. Effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. The more stringent of technology and water quality based limits (as applicable) have been applied to ensure maximum protection of the receiving water.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

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12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Rationale for Water Cut, Inc.

1. **Outfall 001** - treated sanitary wastewater, floor washdown wastewater, and ultra high pressure jet cutting water (estimated flow is 430 GPD)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow (GPD)	---:Report	
BOD	---:45 mg/l	Similar discharges and previous permit* (BPJ)
Oil & Grease	---:15 mg/l	Similar discharges* (BPJ)
COD	200 mg/l:300 mg/l	Similar discharges* (BPJ)
Fecal Coliform	---:400 mg/l	Similar discharges and previous permit* (BPJ)
Colonies/100 ml	(Weekly Avg)	
TSS	---:45 mg/l	Similar discharges and previous permit* (BPJ)
pH	6.0 - 9.0 su	Similar discharges and previous permit* (BPJ)

Treatment: Hootie 500 STP

Monitoring Frequency: Once per three months for flow, oil and grease, COD, TSS, and pH and once per six months for BOD and fecal coliform at the point of discharge from the STP prior to mixing with waters of the state.

Limits Justification: Limits and monitoring frequencies are based on the previous permit and/or current guidance for similar discharges from other facilities. **NOTE:** COD and oil and grease were added to account for the floor washdown wastewater. COD was used instead of TOC because the floor washdown wastewater and the ultra high pressure jet cutting water is used to cut various materials including glass, marble and metal both of which are similar to equipment washwater.

* Existing permits for similar outfalls
BPJ Best Professional Judgement
su Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

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STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

As per LAC33:IX.2341.B.14.k, stormwater discharges from facilities classified as SIC Codes 3231 and 3281 are considered to be associated with industrial activities. However, the activities at this facility are located indoors and qualify for the No Exposure Certification. The No Exposure Certification form was received 12/19/05. Therefore, an SWP3 is not included in the permit.